#### State Library of North Carolina – Library Services and Technology Act

## LSTA NC ECHO DIGITIZATION GRANTS North Carolina ECHO, Exploring Cultural Heritage Online 2008-2009

#### **Program-Specific Information & Guidelines**

#### 1. What is this grant program and its purpose?

This Digitization Grant program is a component of North Carolina ECHO ("*Exploring Cultural Heritage Online*")—one of the State Library's LSTA-funded statewide projects. North Carolina ECHO's goal is to extend the use of digital technologies to broaden access to the unique collections housed in North Carolina's libraries, archives, museums, and historical societies. To accomplish this, North Carolina ECHO has worked in partnership with the state's cultural institutions to conduct a comprehensive statewide needs assessment, formulate a set of guidelines for digitization, craft a continuing education program, create an online portal to the State's special collections, and develop grant programs.

To achieve the vision for NC ECHO, the State Library of North Carolina offers a digitization grant program. The program is detailed below:

Previously three separate grant programs, the LSTA NC ECHO digitization grants have been combined into a single program for 2008-2009. With this combination come changes to the grant program:

- new maximums for single institutions as well as collaborative projects;
- minimum amount that can be sought in this category is \$2,500;
- all grants with proposed budgets up to \$10,000 do not require the 10% match, but grants above \$10,000 still require the 10% match; and additionally,
- all LSTA NC ECHO digitization grants require a Letter of Intent (LOI).

The LSTA NC ECHO Digitization Grants are intended to help eligible libraries and partner institutions create online resources that improve access to the special collections of North Carolina. Proposed projects will:

- Create online resources that focus on topics important to the history and cultural heritage of North Carolina;
- Adhere to current standards and best practices in the incorporation of metadata into digitization projects; and
- Establish effective, sustainable collaborative partnerships that foster the sharing of expertise, skills, and resources among cultural heritage institutions.

The grant program aims to help the state's libraries and their partners provide quality online content that reflects the rich diversity of cultural resources held by the State's institutions and the people who created them, while encouraging collaborative ventures between libraries and other types of cultural repositories.

Project activities will focus on:

- The creation of digital surrogates of original special collection materials and the online presentation of this digital content; and/or
- The encoding of existing finding aids for archival and/or manuscript collections and the online presentation of these resources.

Grants may be single year or multiyear (up to three years) in length. (See section #3 below for details of multiyear grants.) Grants must also follow the *NC ECHO Guidelines for Digitization* found at <a href="http://www.ncecho.org/guide/toc.html">http://www.ncecho.org/guide/toc.html</a>.

Providing resources that enrich educational opportunities for children and teens is a priority for NC ECHO. Digitization projects may be strengthened by including appropriate activities to support the state's educational programs. **Appendix B** provides guidance for project planners that wish to include support for K-12 education in North Carolina.

Libraries without previous experience in creating digital content are encouraged to talk with the NC ECHO staff about their ideas for digitization and may need to start small, possibly below \$10,000. Libraries with extensive experience in creating digital content and with established partnerships with other cultural institutions will be able to propose a larger, multiyear project. Target libraries for large-scale, collaborative grants are those with experience in creating digital content and with collections that have broad, statewide value.

NC ECHO Digitization Grants do **not** support:

- collection development activities, including the identification or acquisition of new materials;
- preservation activities or materials (reformatting of media, preservation enclosures, etc.);
- arrangement, description, or cataloging of original material;
- · retrospective conversion of catalog records;

or

• digitization of runs of newspapers, either from paper copy or from microfilm. (See section #6 below for more detail about ineligible expenses.)

These grants will support the implementation of several facets of the *Library Services & Technology Act Five-Year Plan 2008-2012* (available at <a href="http://statelibrary.dcr.state.nc.us/lsta/plan2008-12.pdf">http://statelibrary.dcr.state.nc.us/lsta/plan2008-12.pdf</a>), but principally Goal 2:

Goal 2 – Enhance information for lifelong learning for all North Carolinians by expanding the information resources in our state's libraries through strengthening, sharing, digitizing and preserving our valuable and unique collections.

These grants are in a category called "Project Grants" in the policies and procedures outlined in *Library Services & Technology Act Five-Year Plan 2008-2012* at the URL above. The grants have a two-step process: 1) eligible libraries submit a Letter of Intent and 2) libraries whose Letter of Intent is approved may submit a full application. See details in #3 of *General Information & Provisions* for 2008-2009 LSTA grants at <a href="http://statelibrary.dcr.state.nc.us/lsta/GenInfoProvs08-09.pdf">http://statelibrary.dcr.state.nc.us/lsta/GenInfoProvs08-09.pdf</a>.

#### 2. Who may apply?

The following libraries are eligible to submit a Letter of Intent:

- public libraries that qualify for grants from the Aid to Public Libraries Fund;
- community college libraries;
- libraries serving the constituent institutions of the University of North Carolina (which includes libraries serving the Area Health Education Centers);
- libraries serving the member institutions of North Carolina Independent Colleges and Universities;
- qualifying state agency libraries;
- qualifying special libraries; and
- the State Library of North Carolina.

Only libraries that submit a Letter of Intent by November 15, 2007, and receive authorization to submit a full application are eligible to apply for an NC ECHO Digitization Grant.

An eligible library system or academic institution may submit only one NC ECHO Digitization Grant application in this round. [Definitions: A library system is inclusive of all outlets making up that system (e.g. Nantahala Regional Library). An institution is the parent institution of the library (e.g. UNC-Greensboro).]

These LSTA grants can only be awarded to libraries, and a library must serve as the lead institution in a collaborative endeavor. Libraries are encouraged to collaborate with libraries or other cultural institutions in their proposed grant projects.

Due to the nature of these federal funds

- libraries may apply directly for these grants and need not collaborate with another agency to receive funds, while
- non-library cultural agencies (e.g. archives, museums, historical/genealogical societies) must
   collaborate with a library in any project receiving support from this grant program, and
- libraries must be the lead project agent and be the grant applicant for any collaborative projects (i.e., manage the project, including acting as fiscal agent, serving as primary contact for the project, maintaining records and paperwork generated by the grant, assuring the successful implementation of the project, and taking responsibility for completion of final reports).

Previously funded digitization grantees may reapply for funds for new digitization projects or expansion of previous ones. However, each application will compete as its own stand-alone grant project, and priority may be given to projects not previously funded. Applicants should not expect reviewers to possess a prior knowledge of previously funded projects.

#### 3. Multiyear grants

Multiyear grants are an option for the NC ECHO Digitization Grant program. Applicants may submit requests for funding of up to three years to allow sufficient time to:

- develop a sustainable program or service;
- undertake a project that is too complex to complete in one year.

The initial approval of a multiyear project does not guarantee funding for future years, but it does assume the project will have priority over new proposals in subsequent years if:

- federal funds are available;
- the required match from local sources is available;
- the project is being implemented as proposed; and
- the project is being managed according to federal requirements and according to terms of the grant agreement.

Multiyear grants are intended to support *implementation* of new projects. LSTA Project Planning Grants are available to assist libraries if they have not completed the project planning and partnership development activities necessary to a successful project implementation.

In addition to the requirements for any grantee applying for a one-year grant, multiyear applicants must provide information about the final project outcomes, a multiyear action plan and budget for the full project. While evaluation and other factors may lead to changes over the three-year period, applicants must have plans with clear outcomes in order to qualify for initial funding. Modifications to the project during implementation may be allowed in subsequent years with approval of the State Library in consultation with the LSTA Advisory Committee and/or peer reviewers.

The applicant is responsible for ensuring continued access, beyond the term of the project, to online resources created with an NC ECHO Digitization Grant. The project plan must include a discussion of what will be done to ensure ongoing access.

Complete guidelines for multiyear grants are available at <a href="http://statelibrary.dcr.state.nc.us/lsta/multiyear0809.pdf">http://statelibrary.dcr.state.nc.us/lsta/multiyear0809.pdf</a>.

#### 4. What amount of funds may be requested?

The maximum grant request is \$75,000 unless the project is a collaborative effort of multiple partners, in which case the maximum grant request is \$150,000. The minimum grant request is \$2,500. Any amount over \$75,000 (or \$150,000 for a collaborative project) that is required to accomplish the project is the responsibility of the lead library and partners.

Applicants for multiyear grants are eligible to apply for up to the maximum amount of funds allowed annually for this grant program.

#### 5. Are local matching funds required?

Yes, if your proposed budget is \$10,000 or larger, matching funds are required. The local matching funds must be clearly documented in the application and meet the following guidelines.

- LSTA funding of \$10,000 or more requires a local contribution to the project that must equal a
  minimum of 10% of the amount of federal LSTA funds requested. The match is a 1 to 10 ratio of
  matching funds to grant funds. Example: If the grant amount requested is \$20,000, the local match
  must be at least \$2,000, and the total project cost is therefore at least \$22,000 (\$20,000 grant funds
  + \$2,000 local funds).
- All of the cash match must be from local or state funds or funds from non-governmental agencies (e.g. foundations, service groups). Other federal funds and local administrative overhead costs may not be used as match.
- Cash matching funds must be spent for the same categories of allowable expenses as the grant funds [See below: "How may project funds be used?"].
- The local contribution may be a combination of cash and library staff salary and benefits.
- Salary and benefits for existing staff who will work with the project may be used for up to 25% of the
  required local match. Applicants must indicate the role of staff member(s) with regard to the project
  and must provide hourly pay rate and benefits calculations information as well as the number of
  hours the staff will work on the project.
- Matching funds must be from source(s) clearly explained in the grant application.
- Matching funds must be available at the time a funded library signs the grant agreement.
- Matching funds must be available and spent during the same time period as the grant funds: 2008-2009 grant **and match** funds are to be spent in the 2008-2009 fiscal year (July 1- June 30).

The State Library recognizes that a local commitment for future matching funds may not be possible; the intention to provide matching funds in years two and/or three will suffice in the first year of the application.

No expenditures of either grant <u>or local matching funds</u> may be made until lead library representatives and the State Librarian sign the grant agreement.

#### 6. How may the project funds be used?

NC ECHO Digitization Grants are intended to expand access to the special collections of North Carolina's cultural repositories using the Internet and digital technologies. This includes

- digital imaging of primary research materials (manuscripts, artifacts, artwork, photographs, rare books, broadsides, and pamphlets, etc.) and presentation of digital surrogates over the Internet and/or
- the conversion of existing finding aids for archival or manuscript collections. Conversion must include encoding using EAD (Encoded Archival Description) and/or other metadata schema as appropriate and presentation of encoded finding aids online.

The proposal must clearly provide support for each proposed expenditure and should document why it is needed to achieve project outcomes.

#### Eligible expenses:

Equipment guidelines for the LSTA Digitization Grant may be found in **Appendix A** of these guidelines. *Allowable expenditures must follow those guidelines and may include:* 

- **Equipment**, including scanners, computers, and computer peripherals (i.e. printers, DVD-RW drives, external drives, etc.) as well as sufficient memory and storage. Any application that requests equipment should clearly state how that equipment will be used to support the project. This grant program encourages healthy work environments. Any equipment purchased with grant funds should be ergonomically correct.
- Computer furniture
- Basic imaging software (e.g. Adobe Photoshop)
- Digital asset management system for the project, where appropriate. Contact the State Library staff to discuss before submitting a final application.
- Supplies
- Travel and subsistence required for meetings of representatives of collaborating institutions
- Cost of project personnel training
- Personnel

<u>Allowable with grant funds:</u> Wages and benefits for each temporary staff to be employed for the project. Temporary staff means part-time or full-time personnel hired specifically to help carry out the project, or additional hours for existing part-time staff. The budget narrative should explain the basis for determining the salary and benefits, with benefits shown separately from the salary. Fees and expenses for consultants should be included under Contractual Services.

<u>Allowable as a local match:</u> Up to 25% of the required local match can be met with staff salary and benefits, for existing staff that will work with the project. Applicants must indicate the role of staff member(s) with regard to the project, and provide hourly pay rate and benefits calculations information as well as the number of hours they will work on the project.

#### Outsourcing

Grant funds may be used to support outsourcing of digitization and encoding processes. However, if a project will rely heavily on outsourcing, reviewers will give the proposed approach special attention. (Examples of encoding frequently outsourced include, but are not necessarily limited to, EAD and TEI.)

The grant program seeks to build capacity and skills for digitization at participating institutions. Any application proposing to outsource work must provide the rationale for doing so and show that this approach is cost effective. In addition, applicants must demonstrate that the proposed vendor's products and procedures are consistent with the best practices and standards found in NC ECHO's

"Guidelines for Digitization" document (available at <a href="http://www.ncecho.org/Guide/toc.html">http://www.ncecho.org/Guide/toc.html</a>). Institutions should consider testing the vendor's services with a small sample of materials prior to investing a substantial amount of money in outsourcing. The proposal should describe the testing process and report the results.

Use of LSTA funds for certain allowable purchases may require public libraries or public elementary and secondary school libraries to comply with the federal Children's Internet Protection Act (CIPA).

Additional information on CIPA, with guidelines and all required forms, is available at <a href="http://statelibrary.dcr.state.nc.us/lsta/cipa.htm">http://statelibrary.dcr.state.nc.us/lsta/cipa.htm</a>.

#### Ineligible expenses:

- On-going operating costs, such as monthly Internet Service Provider (ISP) fees
- Costs of conventional arrangement, description, cataloging, and preservation measures
- Wages and benefit supplements/reimbursements for existing full-time employees may not be paid
  from grant funds. However, salaries and benefits for existing staff who will work with the project may
  be used for up to 25% of the required local match.
- Entertainment/refreshment costs
- These LSTA grant funds may **not** be used for administrative "overhead" or indirect costs.

#### 7. What is the basis for selecting projects for funding?

#### Eligibility for consideration for funding:

To be eligible for consideration, a library must meet several requirements:

- -- have submitted a Letter of Intent and have been authorized to submit a full application, and
- -- have submitted a full application that is received by the deadline of 5:00 p.m. February 21, 2008.

Two other factors may determine that an application is **not** eligible for further consideration:

#### Rights and permissions

Applicants must be able to certify that they and their partners have full ownership, intellectual property, and privacy rights under current law to create and make available to the public digital copies of materials proposed in their grant application. The State Library reserves the right to request any relevant documentation that supports the applicants' certifications. For more information on these issues, review Chapter 3 of the *NC ECHO Guidelines for Digitization* at <a href="http://www.ncecho.org/Guide/legal.asp">http://www.ncecho.org/Guide/legal.asp</a>.

#### • Conventional methods of access and preservation

Original material intended to be digitized during the course of a Digitization grant project must be properly housed and processed prior to the submission of a grant application.

"Traditional practices form the superstructure of any digital project: basic preservation techniques, good descriptive cataloging, and standard arrangement and description must be performed before the scanner can be plugged in. Digitization is not a "replacement activity," but rather an addition to traditional cultural repository techniques and procedures, and in many cases is an enhancement of them. Finding aids, registration records, and other more traditional information management tools are the starting points for digitization projects." From North Carolina ECHO's "Guidelines for Digitization".

Applicants must demonstrate that

- all primary source materials to be digitized are housed in preservation enclosures and stored in a heated and air-conditioned facility with some form of humidity control.
- all primary source materials to be digitized have been processed (arranged and described), and have adequate access points (finding aids, indices, catalog records, and/or inventories) in place prior to the submission of a grant application.

Grants do **not** fund any of the following: arrangement, description, cataloging, or preservation activities including microfilming or the purchase of preservation or conservation materials (such as boxes, negative sleeves, etc.).

#### Criteria for evaluating eligible applications:

For eligible applications, reviewers will use these criteria to make funding decisions.

I. Content: Proposals will be evaluated on the basis of both the *quantity* and *quality* of the content that will result from the project.

Applicants must demonstrate that their proposed project would provide quality online content, which reflects the rich diversity of cultural resources held by the State's institutions and the people who created them. The size and scope of the proposed grant project (number of digital images, amount of related cataloging, and extent of Web page material needed for context) will also be a factor in award decisions. Projects with subject matter of broad significance and interest are preferred.

<u>Topic:</u> Applicants will be required to describe the topic proposed as the focus for the project and explain why it was selected and why it is important to the history and culture of North Carolina. In addition, applicants must tell how they determined the need for the proposed online resource, and how they ascertained that the project does not duplicate another resource.

<u>Primary Materials/Collections</u>: The application must provide a clear summary description of each collection to be included in the project and why each is relevant to the chosen topic. Sample finding media must be included in the application to demonstrate that the material you intend to contribute to the project has been properly described.

#### End Product:

- The application must describe the proposed end product(s) and presentations of the project.
- Proposed contextual information must add value to the digitized material and be appropriate for the intended audiences(s).
- If you plan to address the needs of the K-12 audience, the proposal must tell how you will make sure the K-12 material adheres to the recommendations in Chapter 8 of the NC ECHO Guidelines for Digitization (<a href="http://www.ncecho.org/guide/toc.html">http://www.ncecho.org/guide/toc.html</a>) and Appendix B of these NC ECHO Digitization Grant guidelines.

Reviewers will take into consideration that larger projects proposed to be undertaken by a single library (non-collaborative/no partners) will be expected to be able to "hit the ground running" and work efficiently producing a greater quantity of content that those projects that involve collaboration.

Collaborations take time and energy to build. For that reason, collaborative projects involving a lead library and one or more partner institutions may be expected to spend comparatively more time and effort making their partnership work in the beginning of their project and as a result may produce less quantity of content. Reviewers will take this into consideration when evaluating the proposed quantity of content for a project.

Reviewers will also consider whether the total amount of digital production proposed is appropriate for the scope of the project.

#### II. Ability and intent to follow the NC ECHO Guidelines for Digitization document

Project plans must clearly demonstrate that participating institutions will follow the *NC ECHO Guidelines for Digitization* in implementation.

The State Library will make a hardcopy version of the *NC ECHO Guidelines for Digitization* document (<a href="http://www.ncecho.org/Guide/toc.html">http://www.ncecho.org/Guide/toc.html</a>) available upon request. Applicants who have not attended the NC ECHO Digitization Institute are encouraged to do so. The next institute is expected to be held in early 2008.

#### III. Appropriate planning process

Applications must reflect that an effective planning process has been carried out resulting in a clear vision of the final product(s) to be produced. Applicants proposing collaborative partnerships should demonstrate how all partners were involved in the planning process. Applications should outline a project plan that is both appropriate and thorough, and that includes a process to carry out effective evaluation of the project.

#### IV. Overall quality and clarity of plan, including budgets

Proposals must be clear in the description of the proposed project plan and should not assume that reviewers have any familiarity with the applicant institutions or prior projects. Proposals must:

- Clearly describe the products of the project, for example, digital images, online finding aids, related lesson plans, etc.
- Have a realistic action plan that identifies the parties responsible for each step. In most cases, it will be best to provide a narrative and a timeline of your project plan.
   (Tip: Include detail such as anticipated project deadlines and milestones, planning meetings, testing, evaluation and outreach activities, and other significant targets.)
- Provide enough information for reviewers to understand the collection(s), their status, and value; capabilities of the applicant(s); activities to be implemented; and funds to be expended.
- Demonstrate that alternative approaches have been considered, and why the proposed plan is the most desirable.
- Describe an appropriate plan to make potential audiences aware of the online resources.
- Include a process or processes by which the institution(s) will be able to make an adequate evaluation of the project and determine its effectiveness and usefulness.

#### Project budgets are expected to:

- Be appropriate to the plan outlined in the proposal and clearly linked to that plan;
- Explain the basis for all projected expenditures and the basis for the estimates with no unexplained, miscellaneous, or contingency amounts;
- Be reasonable:
- Wages and benefits are detailed separately:
- Include information (e.g. experience and qualifications) about any proposed consultants and other contractual services;
- Relate any travel expenses to the project plan;
- Exclude all disallowed expenditures;
- Meet local match requirements.

### V. Commitment by the institution(s) to providing ongoing access after the project is completed and sustainability of a digitization program

Only those applicants that demonstrate a strong commitment and capability to maintaining the online availability of the resources created by the grant project following its completion will be funded. Applicants should demonstrate that they have:

- Adequate in-house expertise or will be able to provide training to meet project requirements in both creation and long-term maintenance;
- Adequate information technology infrastructure and institutional support to host and deliver the digital product; and

Adequate and appropriate means for long-term storage and back-up of master images.

Applicants will be expected to follow best practices and standards to assure long-term availability of both the on-line digital creation and associated digital master images.

## VI. If the project is collaborative, the lead library must demonstrate its capability to implement the project

The lead library must have

partnership(s) by

- Existing staff expertise in special collections, including general management and conventional methods of preservation and access;
- Existing staff expertise in digitization, web design, and web presentation;
- Significant cultural heritage collections that will form a key part of the proposed project;
- The technology infrastructure suitable to the demands of the project;
- The administrative capacity necessary to manage the project and the relationships with institutional partners;
- The experience necessary to take a leadership role in developing and sustaining a complex, multifaceted effort with partners outside the institution;
- The commitment of the parent institution and the library administration to support the lead library's leadership role; and
- The willingness to assume this leadership role in the proposed project.

# VII. The use of collaboration and effective partnerships to enhance access to special collections. Some institutions may choose to engage in projects involving collaboration. In these proposals, partnerships with other institutions must clearly benefit users by drawing upon individual institutions' strengths, such as collections, experience, and/or technical capabilities. The partnership is more than institutions simply cooperating to request funds for equipment to digitize portions of separate collections. The plan, jointly conceived, should demonstrate a clear focus and shared mission for the proposed project. Applicants should demonstrate the effectiveness of the proposed

- Stating clearly and precisely what each institution will contribute to the project;
- Describing prior experience or commitment to working with the proposed partner(s); and
- Providing strong evidence of a shared understanding of how the project's processes will be managed.

The proposal should clearly describe the nature of the relationship to reflect those qualities, and reviewers will be evaluating collaborative projects using these criteria:

- Partners are appropriate agencies and institutions and have worked together before or have demonstrated their ability to work together by sharing responsibility for planning the project;
- The partner organizations have clearly shared responsibility for determining the need and developing the project plans;
- The goals of the partnership focus on the goal of expanding access to the resources held by the participating organizations and not on the needs of the organizations;
- Each partner organization is fully supportive of the project and playing an active role in the project;
- The role of each partner is clearly defined, and the proposal demonstrates that this will be reflected in the project by describing those roles and specific information about contributions that each organization will make;
- The proposal clearly shows that there is shared authority, leadership is disbursed, and control of the project is shared—and all these elements are clearly defined;
- Resources for the project are pooled or jointly secured for the longer-term effort that is being organized, and
- The partnership and/or programs developed as part of the project are sustainable over time.

The application must include **letters of commitment** from each partner. The information in the letters will be important factors in evaluating the effectiveness of the partnerships. In addition to providing relevant information regarding all the criteria in this section, the letters should state the clear ownership of any equipment purchased during the project and any digital creations resulting from the project, as well as the willingness of the institutions to assume the responsibilities detailed in the application—both during the project and for the long term sustainability of the digital creation(s).

Relationships between the partnering institutions are the responsibility of the partners, and not the State Library. The lead/applicant library is responsible for establishing and enforcing any agreements or contracts with partnering institutions, including matching funds commitments.

#### VIII. Local matching commitment

The library must contribute the required local matching funds (if project is \$10,000 or more), which must be available by the time the library signs the grant agreement. The source of matching funds must be documented in the application. A factor in the review of grant proposals will be whether a library can clearly show that they will have adequate local resources to implement the project. NOTE: In collaborative projects the lead library is responsible for ensuring that the matching requirement is met. Enforcement of any agreements or contracts with partners or outside agencies regarding matching funds is the responsibility of the lead library.

#### 8. What else do applicants need to know?

#### **General Information & Provisions for LSTA Grants**

Further information and requirements for 2008-2009 LSTA grants is provided in the *General Information & Provisions* document at

http://statelibrary.dcr.state.nc.us/lsta/GenInfoProvs08-09.pdf . There you will find essential information such as: additional factors that may be taken into account in the review of all grant proposals and selection of applications for funding; timelines; submission instructions; grant payment procedures; and legal requirements. Applicants must be familiar with this information.

#### **Procurement**

Grant Provisions for this program (included in the document cited immediately above) include the federal regulation requiring grantees to conduct all procurement transactions in a manner providing full and open competition consistent with the standards of 45 CFR 1183.36. Local and state provisions may be more stringent. State requirements are available upon request.

#### 9. For further information:

Questions about the LSTA NC ECHO Digitization Grants should be directed to

- NC ECHO Project Staff: Hilary Perez, <hilary.perez@ncmail.net>, 919-807-7418; or
- Federal Programs Consultant, Penny Hornsby, <penny.hornsby@ncmail.net>, 919-807-7420.

**SLNC 10/07** 

#### **APPENDIX A**

## MINIMUM SPECIFICATIONS FOR NEW DIGITIZATION EQUIPMENT PURCHASES 2008-2009

9/07

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Component	Recommended
COMPUTER	
СРИ	2.8 GHz processor or better
RAM	1 GB or better
Hard Disk	80 GB or better
Expansion	At least one expansion slot
Optical Disk	DVD-RW
Video	64 MB video RAM or better
Monitor	21" CRT or LCD or better
SCANNER	
Scanning Area	8.5" x 14" (legal-sized) or larger
Resolution	1200 x 2400 optical scan resolution (not interpolated resolution)
Bit Depth	42 bit color depth
Dynamic Range	At least 3.4 (if planning to scan film or slides)
Scanner Software	Supports TWAIN
Accessories	Transparent media adapter (for negatives & slides)
Interface	SCSI, USB, IEEE-1394(FireWire)
PRINTER	At a minimum, native 600 dpi color printer (printer vendor may achieve higher resolutions through software enhancement)

#### **APPENDIX B**

#### K-12 Education Information

Applicants are encouraged to use the many resources provided by LEARN NC (<a href="http://www.learnnc.org">http://www.learnnc.org</a>), a program of the UNC-Chapel Hill School of Education, to enhance the K-12 education aspects of their proposed projects. LEARN NC staff work in conjunction with NC ECHO to provide support to applicants on K-12 education outreach, classroom instructional tools, and professional development for teachers.

LEARN NC can assist applicants with selecting and prioritizing materials for digitization in support of *The North Carolina Standard Course of Study*, focusing on what teachers and students will be most likely to use, how materials may fit into classroom instruction, and how the digitized collections may help teachers to present the skills required in the curriculum. Initial consultations with LEARN NC are provided free of charge. For a specific consultation regarding your proposed project, contact Melissa Thibault (<mthibault@learnnc.org>) or Leslie Richardson (<lrichardson@learnnc.org>). Please put "NC ECHO Consultation" in the subject line of your message.

#### Teacher Resources:

The addition of teacher resources related to a Web site's content can promote the most effective use of information provided. Teacher materials could include suggested activities, lesson plans, and examples of student projects.

#### Incorporating Lesson Plans:

- Delineate a strategy for developing and ensuring high quality lesson plans aligned to the *North Carolina Standard Course of Study*, for example:
  - o Contract with local educators to develop lesson plans
  - Offer workshops for local educators to create lesson plans as part of a professional development opportunity
  - Partner with educators at a local college of education to develop and/or evaluate lesson plans
- Lesson plans should use a standardized format, such as the template available on the *Learn NC* Web site at: <a href="http://www.learnnc.org/lessons/">http://www.learnnc.org/lessons/</a>.
- If lesson plans already are available, explain how they will be re-evaluated for alignment with the *North Carolina Standard Course of Study* and adherence to a standard format.
- Provide specific goals for the number of lessons that will be created as well as a realistic timeline for their creation.

#### Multimedia:

Multimedia such as music, audio, video, VR, and graphic files is an important element of a Web site to engage students, thereby enhancing their learning. These files should be provided in several formats to meet the needs of various software applications.

Note: Additional information on these and other topics can be found in Chapter 8 of the *NC ECHO Guidelines for Digitization* at: http://www.ncecho.org/Guide/k12.asp .